

ABSTRACT OF THE DISCLOSURE

An apparatus comprises a signal source, a driver and an electro-mechanical transducer. The signal source is configured to output a haptic feedback signal. The driver is configured to receive the haptic feedback signal and output a drive signal. The electro-mechanical transducer is configured to receive the drive signal. The electro-mechanical transducer is configured to have a set of operational modes. Each operational mode from the set of operational modes has at least one resonant mode from a set of resonant modes.